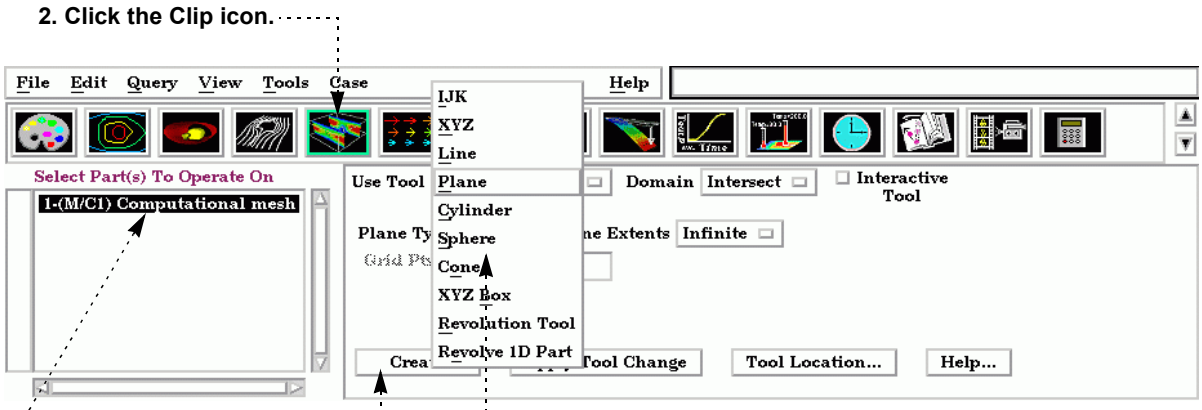
## Introduction

In addition to standard clipping planes, EnSight also provides clipping against quadric shapes. These clips use the corresponding quadric tool **Cylinder**, **Sphere**, **Cone**, **Surface of Revolution**) to specify the location of the clip.

As with clip planes, these tools can also be used to perform cut operations, creating parts which are the “inside” or “outside” of the parent domain.

As with intersection clip planes, quadric clips can be changed interactively by manipulating the corresponding tool with the mouse.

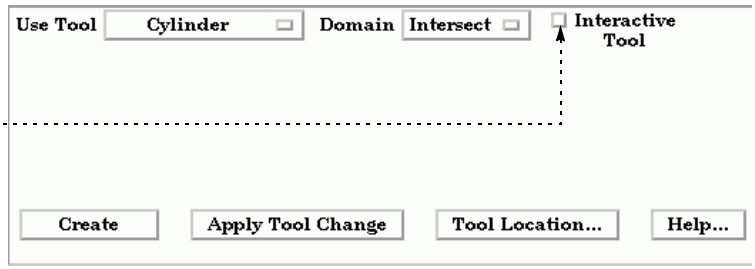
## Basic Operation




## Advanced Usage

Like the other clipping tools in EnSight, intersection quadric clips (except those created with the revolution tool) can be interactive: as you drag the applicable tool with the mouse, the clip is automatically recalculated and redisplayed. To perform interactive quadric clips:

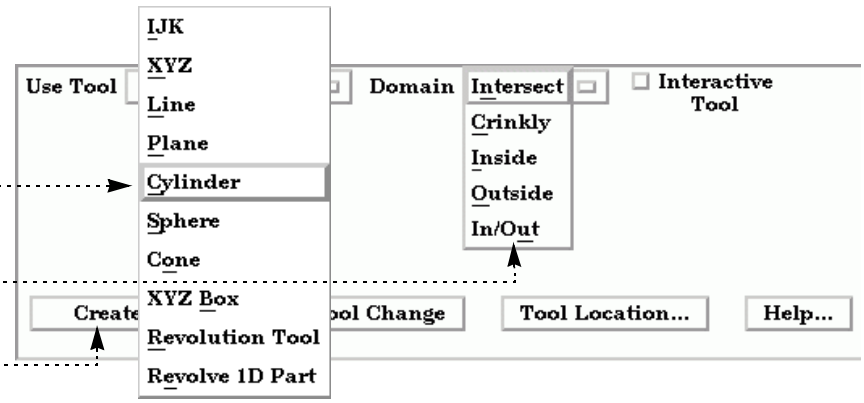
1. **Double-click the desired quadric clip part in the parts list.**
2. **Toggle on Interactive Tool in the Quick Interaction area.**
3. **Move the mouse into the Graphics Window. Click on one of the tool hotpoints (see the How to for the applicable tool) and drag the tool to the desired location.**



## Cutting with Quadric Tools

A quadric tool can be used to create parts which are the result of a cut of its parent domain into “inside” and or “outside” parts. These parts contain valid elements of the same order as the original domain parts.

1. **Select the desired parent parts in the parts list.**
2. **Click the Clip feature icon.**
3. **Select the desired Quadric Tool.**
4. **Set the Domain to Inside, Outside, or In/Out (both inside and outside).**
5. **Hit the Create button.**

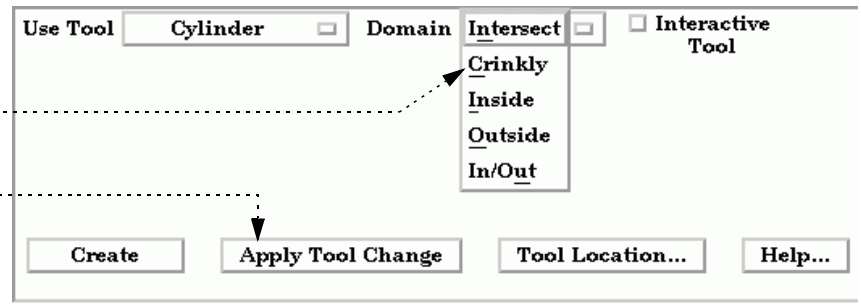



## Crinkly Quadric Clips

You can check the integrity of your mesh by clipping with a crinkly intersection. Specifying a Crinkly Domain results in a part composed of all the elements of the mesh that intersect the quadric tool..

\4. **Change the Domain to Crinkly.**

5. **Click the Apply Tool Change button.**




## See Also

**Introduction to Part Creation**

How To Use the {**Cylinder**, **Sphere**, **Cone**, **Surface of Revolution**} Tool.

Other clips:
**How to Create Clip Planes**
**How to Create Clip Lines**
**How to Create IJK Clips**
**How to Create XYZ Clips**
**How to Create XYZ Box Clips**.

User Manual: **Clip Create/Update**